Electronic Supplementary Material (ESI) for Dalton Transactions


# Synthesis and Antiproliferative Activity of Hydroxyferrocifen Hybrids against Triple-Negative Breast Cancer Cells

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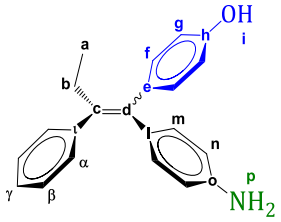
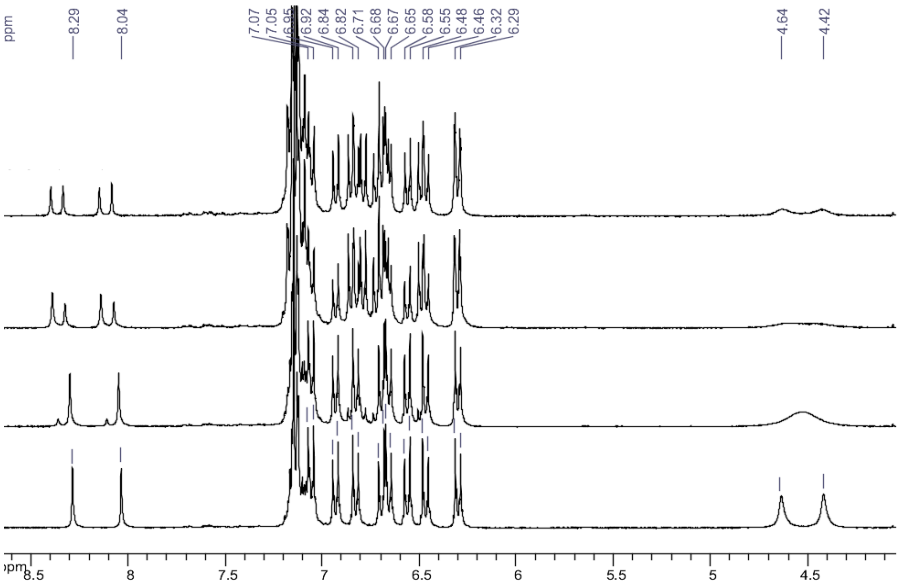
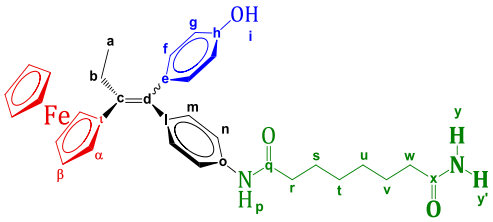
Besides what is shown in Spectrum 1, we observed that triplets at 0.89 ppm and 0.90 ppm assigned to the methyl group ($CH_3$) for the ***E*-3b** and the ***Z*-3b** isomer, respectively, were deformed. This is also the case of quartets at 2.46 ppm and 2.52 ppm for methylene groups ($CH_2$) for ***E*-3b** and *Z*-**3b**, respectively.

In Spectrum 1 we can observe that singulet integrations at 4.42 ppm and 4.46 ppm for amino group ($NH_2$) of each *E* and *Z* isomer, respectively, dramatically decreased. In the aromatic region, new signals around 6.50 ppm, 6.67 ppm, 6.72 ppm, 6.79 ppm and 6.86 ppm appeared accompanied by the decrease of integration intensities of the existent ones. Finally, in the region of the phenolic protons (OH), new two signals at 8.11 ppm and 8.35 ppm were observed next to those assigned for ***Z*-7** and the ***E*-7** at 8.04 ppm and 8.29 ppm, respectively.

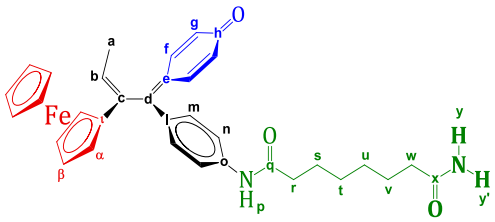


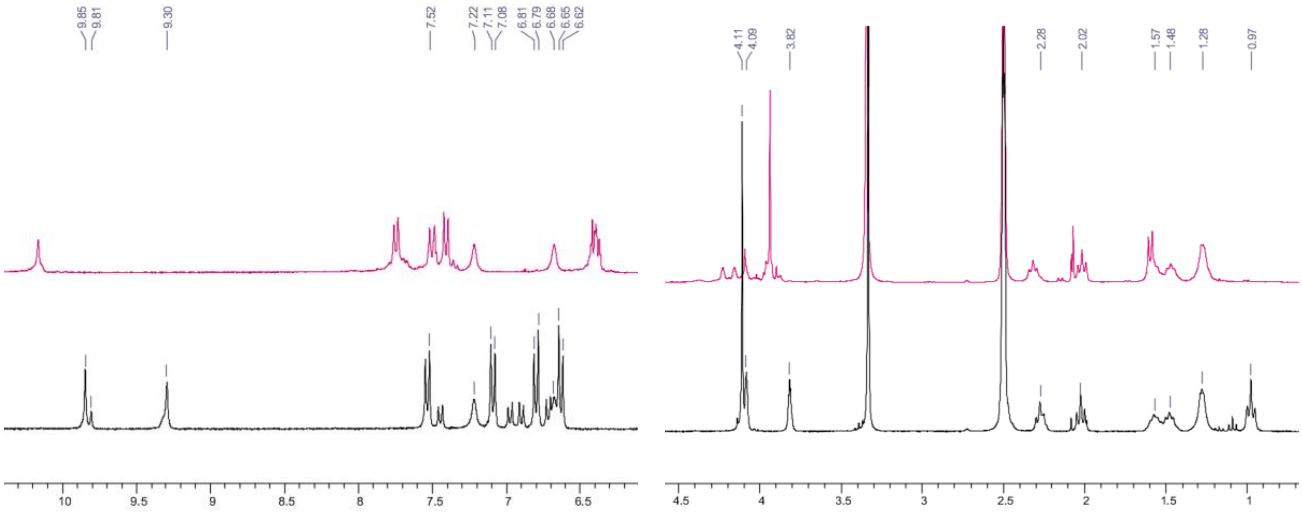

**Spectrum 1.** $^1$H-NMR spectra for **3b** in $(CD_3)_2CO$ at $t_0$, 1h, 24 h and 120 h.



**FcOHTAM-PSA**



**FcQMTAM-PSA**




$^{1}$H-NMR spectra for **FcQMTAM-PSA** (above) and **FcOHTAM-PSA** (below)**.**